

CLAIMS

1. A finishing method to remove burrs for stepping motor stator stacks, each of said stator stacks having a central cylindrical cavity and tooth surfaces, said method comprising steps of:

inserting a high pressure liquid jet spray nozzle for spraying a high pressure liquid jet into said central cylindrical cavity of said stator stacks, said central cylindrical cavity further comprising a central axis, while moving said spray nozzle relatively along said central axis of said central cylindrical cavity and rotating said spray nozzle relatively centered on said central axis of said central cylindrical cavity; and spraying said high pressure liquid jet onto said tooth surfaces of said stator stack such that said burrs remaining on said tooth surfaces are removed.

2. The finishing method to remove burrs for stepping motor stator stacks according to Claim 1, wherein said high pressure liquid jet spray nozzle comprises a plurality of jet orifices.

3. The finishing method to remove burrs for stepping motor stator stacks according to Claim 1, wherein said high pressure liquid jet is inclined in a direction orthogonal to said central axis of said central cylindrical cavity.

4. A finishing method to remove burrs for stepping motor rotor stacks, each of said rotor stacks having a central axis and tooth surfaces, said method comprising steps of:

moving a high pressure liquid jet spray nozzle for spraying a high pressure liquid jet relatively along said central axis of said rotor stack while rotating said spray nozzle relatively centered on said central axis of said rotor stack; and

spraying said high pressure liquid jet onto said tooth surfaces of said rotor stack such that said burrs remaining on said tooth surfaces are removed.

5. The finishing method to remove burrs for stepping motor rotor stacks according to Claim 4, wherein said high pressure liquid jet is inclined in a direction orthogonal to said central axis of said rotor stack.

6. The finishing method to remove burrs for stepping motor stator stacks according to Claim 1, wherein said high pressure liquid jet is pure water.

7. The finishing method to remove burrs for stepping motor rotor stacks according to Claim 4, wherein said high pressure liquid jet is pure water.

8. The finishing method to remove burrs for stepping motor rotor stacks according to Claim 4, wherein said high pressure liquid jet is oriented in a direction tangential to said rotor stack.